ABSTRACT

Title: Case study of physiotherapy treatment of a patient after fracture of the proximal humerus treated by osteosynthesis

This thesis deals with the issues of physiotherapy treatment after fractures of the proximal humerus treated by osteosynthesis. On the basis of knowledge of functional anatomy, kinesiology, traumatology, orthopaedics and by Czech and foreign literature there is an effort to clarify the time and practice schedule of post-operative rehabilitation for the above diagnosis. The work is divided into a theoretical and a practical part.

The theoretical part deals with the function of the shoulder girdle, its individual structures and the influence of segmental defects of the shoulder girdle on upper limb mobility. It also deals with proximal humerus fractures and their treatment. In conclusion, it discusses the issue of post-operative rehabilitation in terms of time and practice.

The practical part describes the specific case study of a female patient after the osteosynthesis of the proximal humerus. It includes an initial kinesiological analysis on the basis of what a physiotherapy procedure had been applied to improve the overall mobility of the upper limb. After finishing treatment a final kinesiological analysis and evaluation of the effect of therapy have been performed, both recorded at the end of this part. The applied physiotherapy procedure is based on knowledge acquired by studies and experience gained during practical exercises and clinical practices.

It was found that early postoperative rehabilitation is a treatment of choice in sense of posttraumatic pain elimination, acceleration of tissue healing, prevention of effects of long-term immobilization and early recovery of lost function. During fixation of the upper limb therapy should focus on surrounding not-fixed structures and stabilization of trunk and scapula. This ensures functional base for following direct rehabilitation of the upper limb.

Key words: shoulder girdle, osteosynthesis, bone healing process, early post-operative therapy, scapular stabilization, rehabilitation.